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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/706,669

11/12/2003

Marc Alan Strand

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7590

12/07/2006

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EXAMINER

SZEKELY, PETER A

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/706,669

Applicant(s)

STRAND ET AL.

Examiner

Peter Szekely

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1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 October 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-113 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-113 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following: In Table 1, on page 13, under **Isobutyrate Derivative**, 2,2,4-trimethyl-1,3-pentenediol, Diisobutyrate and Texanol diisobutyrate are shown as having different solubilities. Since the above two diisobutyrate are identical, the different solubilities do not make sense. In the same Table, on page 15, under **Ricinoleic Acid Derivatives**, "ricinoleate" is misspelled five times.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-113 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification only shows solubilities in the 25°C-160°C range. On the other hand 160°C or less means from -273°C to 160°C. This is a new matter rejection.

4. Claims 1-113 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which

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was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The test for solubility is not a standard ASTM test; it is an "in house test". However, the description on pages 11-12 is not detailed enough to enable one of ordinary skill in the art, at the time the invention was made, to avoid undue experimentation. The following parameters are not known:

(A) The composition of the polyester (plasticized or rigid),

(B) The size and shape of the vial, which would control the ratio of plasticizer to polyester,

(C) The amount of plasticizer above the film, i.e. the meaning of "completely covered", also important for calculating the concentrations, and

(D) The rate of heating.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 6, 10-14, 38, 41, 42, 57, 59, 60, 76-78, 90-92 and 105-107 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. In claims 6, 38, 57, 76, 90 and 105 the trimellitic and citric ester do not meet the solubility test according to applicants' data. The other claims are rejected because at least one diacid and 100% of 1,4-cyclohexanedimethanol does not yield a random polyester copolymer.

**Double Patenting**

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-113 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-33 of copending Application No. 10/722,870. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the ingredients of the instant composition are claimed in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**Claim Rejections - 35 USC § 103**

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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11. Claims 1-113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flynn et al. 6,068,910, in view of Largman 4,356,282, Lee 4,558,085, Nakamura et al. 4,524,191 (for all additives), Shih et al. 5,534,570, Blumenthal et al. 5,570 or JP-4-117432 (for plasticizers), and Klatt et al. 6,538,054 or JP-2002-53740 (for flame-retardants), and Kanno 5,998,005 or JP-2000-186191 (for lubricants).

12. Flynn et al. reveal polyester and lubricant in claim 1, slip agent in claim 7, plasticizers and flame-retardants in column 4, lines 60-65. Largman discloses polyester in claim 2, red phosphorus in claim 1, lubricants in column 5, lines 35-36 and aromatic plasticizers in column 6, lines 50-61, Lee teaches polyester in claim 1, dibenzoate plasticizers in claim 12, flame-retardants in column 6, lines 44-52 and lubricants in column 7, lines 3-12. Nakamura et al. recite polyester in claim 1, lubricants in column 7, lines 64-65, films in column 10, line 33, flame retardants in column 7, lines 45-55 and plasticizer in column 7, lines 44-65. Shih et al. divulge polyester and plasticizers in claim 1. Blumenthal et al. display polyester in claim 1, diethylene glycol dibenzoate in claim 18, lubricants in column 7, lines 48-59 and films in column 7, lines 54-60. Sulfonate polyester is a random copolymer. JP-4-117432 describes polyester and plasticizers in claim 1, dibutyl phthalate, dibenzyl phthalate and triphenyl phosphate on page 6 and polyethylene glycol benzoate on page 7. JP-2002-53740 discusses polyester and phosphoric acid ester in claim 1. Klatt et al. list polyester and pentaerythritol tetrastearate in claim 1 and resorcinol bis (diphenyl phosphate) in claim 3. JP-2000-186191 presents polyester in claim 1, and lubricants in claims 1-5. It would have been obvious to one having ordinary skill in the art; at the time the invention was

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made, to add the additives of the secondary references to the compositions of Flynn et al., because these are plasticizers, lubricants and flame-retardants customarily used with polyesters.

### ***Response to Arguments***

13. Applicant's arguments filed 10/24/06 have been fully considered but they are not persuasive. It is well known that the higher the solvating power of a plasticizer, the compatible it is with a polymer. Accordingly the selection of highly aromatic plasticizers (butyl benzyl phthalate or dibenzoates) and highly polar plasticizers (methyl or ethyl phthalates or adipates) is obvious. Naturally, none of the references can be applied to all the claims by themselves. The rejection is a 103 rejection not a 102 rejection.

Applicants are arguing against an anticipation rejection, when the rejection is for obviousness. Flynn et al. proves that polyesters can be plasticized. The secondary references enumerate the plasticizers, which can be used with polyesters. One of ordinary skill in the art, at the time the invention was made, would select the ones, which have the highest solvating power from a list of equivalents. The rejections are maintained.

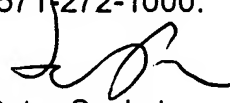
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (571) 272-1124. The examiner can normally be reached on 7:00 a.m.-5:30 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Peter Szekely  
Primary Examiner  
Art Unit 1714

P.S.  
12/1/06